

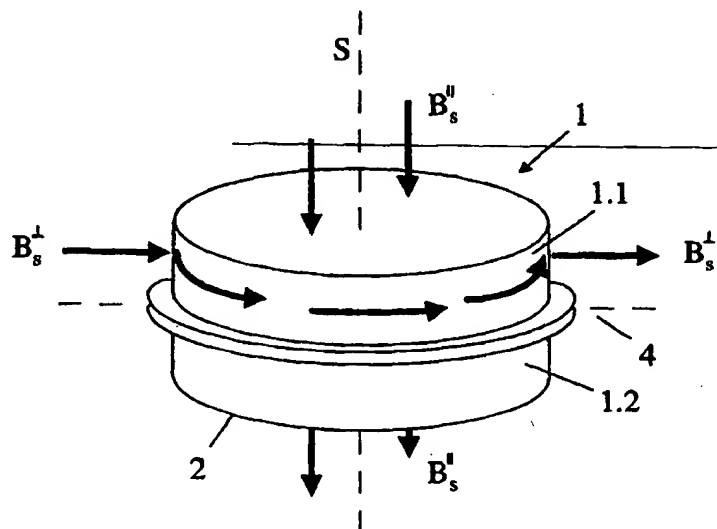
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(54) Title: MAGNETICALLY SHIELDED CONTAINER



(57) Abstract

The invention provides a magnetically shielded container (1) having disposed in parallel opposed position on an axis (S) thereof magnetic field homogenizing pole shoes (10.1, 10.2), having disposed about said axis a magnetically shielded yoke (2), said pole shoes and yoke enclosing a magnetic chamber (26), said container further comprising magnetic field sources (2.4, 2.5) disposed about and radially distanced from said axis whereby there exists within said chamber substantially homogenous magnetic field B_0 oriented in the direction of said axis and whereby there is a usable volume within said chamber where the ratio of the magnetic field gradient in the direction transverse to said axis to said magnetic field B_0 has a value of no more than $1.5 \times 10^{-3}/\text{cm}$. By virtue of the very low ratio of weight to volume that is achievable with this construction, the containers according to the invention are economical to produce and especially suited to transporting polarized gasses.